

Title (en)  
Hands-free telephone

Title (de)  
Handfreier Telefonapparat

Title (fr)  
Téléphone à mains libres

Publication  
**EP 0410698 B1 19960214 (EN)**

Application  
**EP 90308098 A 19900724**

Priority  
JP 18881289 A 19890724

Abstract (en)  
[origin: EP0410698A2] A hands-free telephone for use on a vehicle and having a handset incorporating a radio section therein and a hands-free adapter incorporating a hands-free telephone unit therein. To eliminate howling, this kind of telephone generally needs two variable attenuators, or variolossers, each for changing the level of respective one of a receive and a transmit signal to be applied to a speaker of a hands-free telephone unit and a radio section, respectively, so as to maintain the two levels in a predetermined relation, and a variable resistor for adjusting the volume of voice to be outputted by the speaker. In the present invention, the variable resistor is implemented by a variable resistor which adjusts the level of a receive signal to be applied to a receiver installed in the radio section. This receive signal is controlled in level by a third variable attenuator simultaneously with the above-mentioned variable attenuators.

IPC 1-7  
**H04M 9/10**

IPC 8 full level  
**H04M 1/00** (2006.01); **H04M 1/60** (2006.01); **H04M 9/10** (2006.01); **H04M 3/40** (2006.01); **H04Q 7/00** (2006.01)

CPC (source: EP)  
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Cited by  
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**EP 0410698 A2 19910130; EP 0410698 A3 19920506; EP 0410698 B1 19960214**; AU 5023793 A 19931223; AU 5974990 A 19910124; AU 661615 B2 19950727; CA 2021793 A1 19910125; CA 2021793 C 19941004; DE 69025362 D1 19960328; DE 69025362 T2 19960704; JP 2569917 B2 19970108; JP H03128558 A 19910531

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